



CARTOSHOP

Inviting Interdisciplinary Research through GIS Mapping Workshops

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About Scholars' Commons

The Indiana University Libraries Scholars' Commons opened in the fall of 2014. The space is designed to support collaborative interdisciplinary research by offering access to tools, technology, and experts to facilitate the use of those tools and technologies. Within the space, there are several service points, which include a digitization lab with large-format scanners and AV digitization equipment, collaborative consultation rooms, an IQ Wall,^{*} a lecture hall, and reference services. The co-location of these spaces offers a level of flexibility and service unparalleled on campus. In addition to offering tools and space for researchers, the Scholars' Commons staff also coordinate programming, which often takes the form of workshops.

* "The IQ-Wall is part of a distributed visualization initiative here at the Indiana University Advanced Visualization Lab. The goal of this initiative is to use commercial-off-the-shelf hardware and open-source software to provide low-cost, advanced visualization resources for the University community and beyond. The IQ name stems from the four qualities: Inexpensive, Interactive, Immersive, and Interface (I-quaded or IQ). Another key quality of any IQ system is its ability to be relatively easily built, installed, and configured in a variety of spaces." From: <https://rt.uits.iu.edu/visualization/avl/systems/iq-wall.php>.

Workshops held in the Scholars' Commons are marketed as part of the Scholars' Commons Series and are designed to support research at any stage. The primary audience tends to be graduate students, faculty, and staff from across campus. Workshops in the series are presented by librarians, library staff, and library partners. The diverse background of presenters fosters creativity and offers opportunities to learn new tools and to support participants throughout their tenure at Indiana University.

Past workshop miniseries included under the Scholars' Commons Series are Supercharge Your Dissertation, What to Expect When You're Expecting Your MLS, Maker Mondays, and CartoShop. Each of these miniseries is targeted toward a specific group or department on campus. This targeted approach is an attempt to reach research needs as they are expressed through either consultations or research assistance requests. The CartoShop miniseries, in particular, directly responds to research needs expressed during consultations and research assistance requests addressed to the GIS Librarian.

About CartoShop

CartoShop is a workshop series centered on geographic information systems (GIS), maps, and spatial learning. The primary audience is graduate students, though the series is open to all.

CartoShop was born from a belief that geospatial technology and research methods can be used to enhance research in nearly every discipline. Traditionally, GIS and spatial research methods have been limited to a few academic departments; namely geography, geology, urban planning, and epidemiology. These departments often have internal support for GIS and offer semester-long classes on GIS as used in their field. However, the continued democratization of GIS software and trend towards open spatial data has made geospatial technology more accessible, and it is no longer limited to those with expensive software licenses and years of training. The expansion of web-based mapping tools and greater availability of spatial data, coupled with growth of interest in digital humanities, have made geospatial research methods more accessible to a broader range of scholars. While the technology has expanded, support for GIS and spatial research in all academic departments has not grown at the same pace. This presents an opportunity for a new home for GIS and spatial learning in the library. As a central place on campus, the library is able to offer discipline-agnostic training and support for GIS through research consultations and workshop series like CartoShop.

CartoShop offers a range of workshops each semester for an interdisciplinary audience. The series is designed so that participants may attend a ramped

progression of workshops throughout the semester or participate in single workshops. CartoShop workshops vary by semester and include hands-on learning for specific tools, theory-driven talks on core concepts of cartography, and practical workshops to learn a specific skill. Examples of past workshops include “Map Speed Dating,” “Intro to Web Mapping with CARTO,” “Narrative Mapping with ESRI StoryMaps,” “How to Really Map Your Run,” “Humanitarian Mapping with OpenStreetMap,” “Using Historic Maps in Digital Projects,” “Mapping for Digital Humanists,” and “3D Maps for ArcGIS.”

CartoShop workshops are most often led by the GIS Librarian, though the workshop series offers an opportunity to partner with other librarians and groups on campus that are engaging with spatial research in different ways. These strategic partnerships are helpful for reaching a broad audience of graduate students and expanding the range of CartoShop offerings. For example, a partnership with the Indiana Geological and Water Survey to teach a workshop on 3-D maps for ArcGIS provided a public forum for the agency to share its knowledge and research, while offering attendees expert guidance on real-world use of GIS in the field. Other successful partnerships have included University Information Technology Services (workshop on QGIS), fellow librarians (“Maker Monday: Embroidery Maps”), and the Institute for Digital Arts and Humanities (“Rewiring Consent: Maps”). Besides the benefit of expanding workshop offerings and lessening the burden on one librarian by partnering with other groups on campus, CartoShop was able to leverage the connections and distribution networks of these partners to reach yet a larger and more diverse audience. The partnership with the Institute for Digital Arts and Humanities (IDAH) was particularly successful in this regard. IDAH caters to faculty and students in the humanities who engage with digital methods and tools. “Rewiring Consent: Maps” was part of a workshop and lecture series that used digital tools and methods to examine issues surrounding consent, sexual assault, and Title IX reporting on Indiana University Bloomington’s campus. With over forty students and faculty members attending the “Rewiring Consent: Maps” workshop, attendance was significantly higher than independent CartoShop workshops. In addition, by connecting with IDAH’s established network of scholars, the GIS Librarian was able to reach a new population of graduate students in the humanities.

Promotion/Outreach

One of the benefits of the Scholars’ Commons model is a centralized method of promoting events and the workshop series. The Scholars’ Commons has designated staff members who are responsible for outreach related to the space and promotion of events within the space, especially the workshop series. Pro-

motion for the workshop series is carried out using a combination of three distinct methods: flyers, social media, and email. Paper flyers are designed for each workshop and miniseries, like CartoShop, that falls under the Scholars' Commons Series umbrella (see appendix 17A). These flyers are then posted in highly trafficked areas in the library and around campus. Workshops and series are also promoted digitally via Facebook, Twitter, and email. Emails targeted to specific departments and groups on campus are sent when appropriate. A Listserv for the Scholars' Commons Series is also maintained, and each week, a digest of upcoming events is distributed. Word-of-mouth promotion also increases attendance but is more difficult to account for and assess.

In addition to the more traditional methods of outreach and promotion outlined above, the Scholars' Commons Series is also a point of focus and discussion at the annual Graduate Student Reception, which is held in the space. Subject liaisons and other library representatives also visit graduate student orientation meetings and bring along print versions of the upcoming semester workshop schedule. As the schedule is solidified, Scholars' Commons staff work with subject liaisons in the library to encourage promotion to relevant departments and groups on campus.

The GIS Librarian also partners with other subject liaison librarians to send workshop flyers and announcements to multiple departments. By communicating with these departments through library liaisons, the GIS Librarian benefits from existing relationships and can rely on colleagues to strategically promote CartoShop in a method that fits each individual department. Often, this includes identifying key faculty members to help promote CartoShop, which provides an opportunity for colleagues to introduce the GIS Librarian to faculty in other departments. These connections lead to GIS-specific course instruction and research consultations with the department. Involving colleagues in this process allows the GIS Librarian to reach a wide variety of departments more effectively. Liaison librarians who are involved with their departments have already done the work to identify faculty and graduate students who might benefit from working with the GIS Librarian and who would be receptive to attending CartoShop workshops.

Who Comes to CartoShop?

Scholars' Commons workshop attendance is assessed in two ways: through sign-in sheets and follow-up surveys. At the beginning of each workshop, a sign-in sheet is circulated, and attendees are each asked to give their name, IU email address, departmental affiliation, and class standing or university position. At the end of each workshop, a paper survey is handed out, which asks participants

to assess their satisfaction with the workshop, in addition to recording their class standing or university position and departmental affiliation. While Scholars' Commons workshops are open to all, the primary group of attendees tends to be graduate students, although this does vary depending on the topic of the workshop.

For the CartoShop series, the primary attendees are graduate students. This assessment of attendees at CartoShop workshops is based on data collected over a three-semester period. Throughout that time, fourteen CartoShop workshops were held in the Scholars' Commons. These workshops drew sixty-nine unique attendees, including faculty, staff, community members, undergraduates, and graduate students. As stated above, graduate students by far made up the largest portion of attendees, at 42 percent (see figure 17.1).

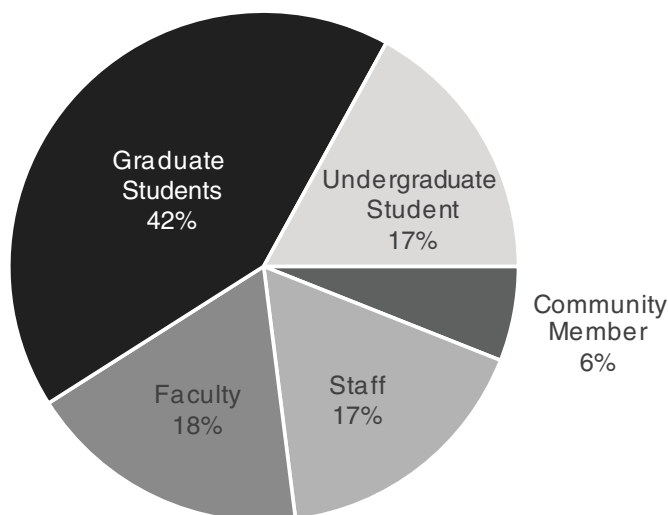


Figure 17.1

Percentage of CartoShop attendees by academic status.

CartoShop's interdisciplinary reach is also significant. Survey data indicates that participants hailed from thirty-six different departments and units on campus. Represented departments fell into five disciplines: area studies, humanities, informatics and computing, sciences, and social sciences. Humanities was represented most often, while social sciences, sciences, and informatics and computing were represented nearly equally, with area studies being least frequently represented (see figure 17.2).

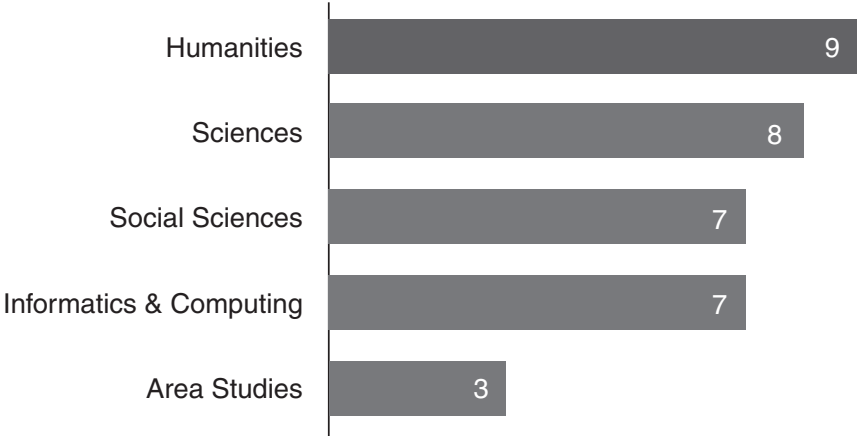


Figure 17.2
Count of CartoShop attendees by academic area.

Impact

The impact of CartoShop does not end when the workshops are completed. Over the three-semester study period, 20 percent of CartoShop attendees returned for a research consultation with the GIS Librarian. CartoShop workshops also provide an opportunity for the GIS Librarian to refer attendees to colleagues throughout the library, particularly Digital Collections Services, Scholarly Communications, and other subject specialists. In those cases, CartoShop is an outreach tool for the library more broadly, not just for the GIS Librarian. By providing a space for graduate students to learn specific skills, ask questions, and become more acquainted with library services, CartoShop meets the goals of the Scholars' Commons to support research broadly.

Connections made through CartoShop workshops have led to collaborative projects across campus. Workshop attendees are able to meet others interested in digital mapping or spatial data and have the opportunity to converse with people doing similar research, but with a different disciplinary approach. This space for interdisciplinary conversations provides graduate students with new ideas and resources beyond the scope of their departments. For example, a political science student doing work on borders and migration was able to connect with researchers in the geography department who study the same issues, but through a different lens.

In addition, CartoShop workshops have provided opportunities for the GIS Librarian to make connections with other groups on campus. Some of these

connections have led to projects that involve the entire campus. Examples of collaborations born from CartoShop workshops include assisting a graduate student in course design for a spatially driven history class, working with the Indiana Foodways Project to create maps and store spatial data related to food systems in the state of Indiana, and working to create maps for the Kurt Vonnegut festival.

By providing a beginner-friendly and open space for graduate students to learn and ask questions about maps and spatial research tools, CartoShop is a springboard for collaborative research and a doorway to the library.

Appendix 17A: Sample Flyers Promoting the Cartoshop Miniseries





CARTOSHOP

Workshops on Digital Mapping

Scholars' Commons
Fall Series 2016
libraries.indiana.edu/workshops

MAP SPEED DATING

Thursday, September 22 • 10:00-11:00am
Wells Library E159 (Hazelbaker Hall)

Come learn about a variety of mapping tools! New and exciting tools are being developed all the time... We'll examine pros and cons of each, look at some examples, and discuss what might work best for your mapping project. If you're new to GIS and mapping, this is a great place to start!

USING HISTORIC MAPS IN DIGITAL PROJECTS: THE WHAT, THE WHERE, AND THE WHY FOR

Tuesday, October 18 • 10:00-11:00am
Wells Library E159 (Hazelbaker Hall)

Are you working on a historical mapping or Digital Humanities project? Do you have old maps and want to integrate them into your projects? This workshop will cover various sources of historic maps, including print maps at IU and digitized collections around the world. We'll discuss how using a historic map can enhance your project, and develop a practical workflow for going from print to pixels.

INTRO TO CARTO

Tuesday, November 1 • 1:00-3:00pm
Wells Library W144

CARTO (formerly CartoDB) is a free, cloud based tool for mapping and data visualization. This workshop will take you through the steps of creating a map, including uploading, editing data, styling your map, and publishing. No GIS or coding experience necessary. Even if you're already familiar with CartoDB, you might be interested in learning about the new CARTO editor.

3D MAPS FOR ARCGIS

Tuesday, November 15 • 2:00-3:00pm
Wells Library W144

Presented by Kevin Russell from the Indiana Geological Survey, this workshop will introduce you to the newly created 3D elevation service for Indiana and walk you through how to create 3D scenes in ArcGIS. Some familiarity with ArcGIS Software is recommended.

CONSULTATION HOURS

Maps, GIS, & Geography
Wednesdays • 2:00-4:00pm
Wells Library 157L

- Design and implement a mapping or GIS project
- Find and use spatial data
- General Geography research assistance

Presented by Theresa Quill, Social Sciences Librarian
theaward@indiana.edu

OPENSREETMAP

Wednesday, October 26 • 10:00-11:00am
Wells Library W144

Often called "The Wikipedia of Maps", OpenStreetMap is an open source, crowd sourced base map of the world, created by you! We'll learn how to edit OpenStreetMap and work together to improve the map of Bloomington, and other areas of interest. OpenStreetMap has become the go-to map for humanitarian aid organizations to use post-conflict. Volunteers at IU and around the world gathered to map Nepal after the earthquakes in April 2015. This workshop will prepare you to contribute to humanitarian mapping projects in the future.



SCHOLARS' COMMONS | FALL 2017 CARTOSHOP

This series, part of the Scholars' Commons Workshop Series, features a number of sessions about maps and map-making. Topics include digital cartography tools, web maps, Geographic Information Systems (GIS), Spatial Humanities, and crowdsourced maps.

Consultation hours with Librarian Theresa Quill

Tuesdays 2:00 – 4:00pm | 157R

Questions? Email Theresa Quill at theward@indiana.edu.

Core Concepts of GIS and Cartography

Wednesday, October 4 | 2:00 – 3:00pm | Hazelbaker Hall (Wells E159)

This is a great place to get an overview of the field, and is designed for both those totally new to cartography/GIS and those who want to dive a bit deeper into cartographic conventions.

Basics of Satellite Imagery

Tuesday, October 17 | 2:00 – 3:00pm | Hazelbaker Hall (Wells E159)

We'll learn how imagery is collected, how it is used in various fields, resources for finding imagery, and what we can learn from imagery analysis. We will discuss applications for satellite imagery in monitoring climate change, determining elevation, humanitarian efforts, and for intelligence operations.

Humanitarian Mapping - OpenStreetMap and Tomnod

Tuesday, November 7 | 2:00 – 3:00pm | Scholars' Commons IQ-Wall (E157H)

OpenStreetMap is an open source, crowd sourced basemap of the world. We'll learn how to edit OpenStreetMap and work together to improve the map of Bloomington and other areas. Tomnod uses satellite imagery and a team of volunteers to work on campaigns as varied as counting seals to detecting wildfires.

GIS Field Data Collection

Tuesday, November 28 | 2:00 – 3:00pm | Wells W144

Turn your phone into a data collection device! This workshop will cover how to collect spatial data using only your phone and a free app. Then, we'll take our fresh data and turn it into a map!

Desktop Cartography with ArcGIS

Thursday, November 30 | 2:00 – 4:00pm | Wells W144

This workshop is designed for Historians or others who may need to create their own static maps for a presentation or publication.



LIBRARIES

<https://libraries.indiana.edu/workshops>

